

AMENDMENTS TO THE CLAIMS

16. (Previously Presented) A method of determining validity of a translated instruction comprising:

a) starting execution of a first host instruction translated from a first target instruction, wherein said first host instruction is linked from a second host instruction translated from a second target instruction, and wherein a first condition of a target system state required by said first host instruction holds;

b) testing a second condition of said target system state to determine the validity of said first host instruction;

c) executing said first host instruction if said second condition holds; and

d) generating an exception if said second condition does not hold.

17. (Previously Presented) The method of Claim 16, wherein said first condition is based on an address consistency check of said second host instruction.

18. (Previously Presented) The method of Claim 17, wherein said b) comprises performing an address consistency check of said first host instruction.

19. (Previously Presented) The method of Claim 16, wherein said b) comprises performing an address consistency check of said first host instruction.

20. (Previously Presented) The method of Claim 16, wherein said d) further comprises invalidating said first host instruction.

21. (Previously Presented) The method of Claim 16, wherein said d) further comprises removing said link between said first host instruction and said second host instruction.

22. (Previously Presented) The method of Claim 16, wherein said d) further comprises creating a new translation of said first target instruction.

23. (Previously Presented) The method of Claim 16, wherein said d) further comprises interpreting said first target instruction.

24. (Previously Presented) A method of determining validity of a translated instruction comprising:

a) performing a first address consistency check of a first host instruction made from a first target instruction to verify that said first host instruction is valid;

b) executing said first host instruction;

c) determining whether a second host instruction made from a second target instruction and that is linked from said first host instruction can be safely executed without a second address consistency check; and

d) executing said second host instruction without performing said second address consistency check if safe.

25. (Previously Presented) The method of Claim 24, further comprising:

e) performing said second address consistency check if said determination is that it is unsafe to execute said second host instruction without said second address consistency check; and

f) executing said second host instruction.

26. (Previously Presented) The method of Claim 24, wherein said c) is implied from said first address consistency check.

27. (Previously Presented) The method of Claim 26, wherein multiple target instructions are translated to host instructions and wherein said c) comprises determining whether any of said target instructions reside on different pages of memory.

28. (Previously Presented) The method of Claim 24, wherein multiple target instructions are translated to host instructions and wherein said c) comprises determining whether any of said target instructions reside on different pages of memory.

29. (Previously Presented) A method of linking translated instructions comprising:

- a) translating a first target instruction to a first host instruction;
- b) determining that said first host instruction is to be linked to a second host instruction translated from a second target instruction; and
- c) providing an address consistency check for said first host instruction.

30. (Previously Presented) The method of Claim 29 wherein:

said b) comprises determining at the time said translation of said first target instruction is made that said first and second host instructions are to be linked; and

said c) comprises:

- c1) linking said second host instruction to said first host instruction; and
- c2) including code for performing said address consistency check as a part of said first host instruction.

31. (Previously Presented) The method of Claim 29 wherein:

said b) comprises determining after said translation of said first target instruction is made that said first and second host instructions are to be linked; and

said c) comprises:

c1) linking said second host instruction to code for performing said address consistency check; and

c2) linking said code for performing said address consistency check to said first host instruction.

32. (Previously Presented) The method of Claim 29 wherein:

said b) comprises determining after said translation of said first target instruction is made that said first and second host instructions are to be linked; and

said c) comprises:

c1) linking said second host instruction to said first host instruction; and

c2) incorporating code for performing said address consistency check into said first host instruction.

33. (New) The method of Claim 17, wherein said first condition is that an address stored in said second host instruction matches a physical address of said second target instruction.

34. (New) The method of Claim 33, wherein said b) comprises verifying that an address stored in said first host instruction matches a physical address of said first target instruction.

35. (New) The method of Claim 18, wherein said b) comprises comparing a physical address of said first target instruction against an address stored in said first host instruction.